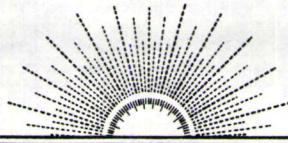


File ACT/049/009



# Sunshine Mining Company

Eureka Operations

P.O. BOX 250 PHONE: (801) 433-6854

Eureka, Utah

84628

RECEIVED

JAN 31 1985

DIVISION OF OIL  
GAS & MINING

Leon J. Munyan,  
Resident Manager

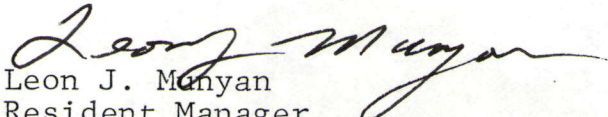
January 28, 1985

Susan Linner  
Permit Supervisor  
Division of Oil, Gas and Mining  
Three Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Susan:

We would like to respond to our meeting of January 24, 1985. We appreciate your and Randy's suggestions and feel that the differences on these stipulations are minimal. I have enclosed an addition to the application that covers all the remaining questions about the application amended and submitted December 14, 1984. Please review our letter of January 16, 1985.

Sincerely,

  
Leon J. Munyan  
Resident Manager

LJM:lr1

xc: W. Booth  
J. Jarvis  
Files

Addendum  
Burgin Project ACT/049/009  
Sunshine Mining Company

**Trixie Shaft:**

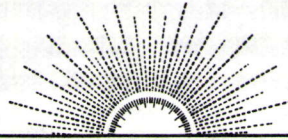
Please refer to the revised reclamation budget submitted in December, 1984 and notice under "Trixie Mine" a cost of \$450.00 for shaft closure. This technique is the same as the Hunter Shaft and the Apex Shaft. Only the access road and pad around the shaft would be left open per Chief Consolidated's request.

**Stipulations:**

1. The Apex Shaft bond will be retired and this amount included under one bond for \$737,000 as noted in the tentative approval decision of December 28, 1984.
2. The seed mix for the waste dump may be adjusted to a more diverse mixture of forbs, grasses and shrubs, if needed. This need will be decided in 1985 following analysis of test plot data at the Apex.
3. Soil Sampling Procedures:
  - A. Following grading of soil medium
  - B. Sample Depth 0-12"
  - C. Subsamples thoroughly mixed into a composite sample
  - D. One quart composite sample transported directly to lab
  - E. Large ponds (4), 20 subsamples per composite sample - one composite sample per pond
  - G. Soil tests
    - EC Electrical Conductivity, MMSOS/CM
    - ESP Exchangable Sodium Percentage, Units
    - PH PH Units
    - SAR Sodium Absorption Ratio, Units
    - N Nitrogen, Extractable, PPM
    - P Phosphate, Extractable, PPM
    - K Potassium, Extractable, PPM
    - OC Organic Carbon, %
    - Percent Base Saturation Units
    - Texture, Size Classes %
  - H. Estimated cost per composite sample = \$130.00  
8 samples @ \$130.00 = \$1,040.00



File AG/049/009



## Sunshine Mining Company

Eureka Operations

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JAN 22 1985

DIVISION OF  
OIL, GAS & MINING

Leon J. Munyan,  
Resident Manager

January 16, 1985

Susan Lirmer  
Permit Supervisor  
Division of Oil, Gas and Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Susan:

We appreciate the efforts of the Division of Oil, Gas and Mining regarding the permitting of Sunshine Mining Company's Burgin Project. We are also pleased with the cooperation extended by your project group, and hope to continue this relationship in the future.

With regards to the Tentative Approval Decision, Burgin Project, we would like to comment on the stipulations. We hope these comments will be taken as the basis for a continuing dialogue between Sunshine Mining Company and your office. In general, we feel some of the stipulations are a bit "picky" and not economically justifiable at this time.

### Stipulations:

1. We do wish the Apex reclamation total to be included in the Burgin Project costs and one bond issued for all reclamation costs.
2. We do agree to alter the seed mix based on test plot results.
3. The majority of the soil scraped to construct the pond dikes came from the top 18-36" of the Medburn fine sandy loam soil type. The A11, A12, C1, C2 and C3 horizons which comprise 95% of this scraped material has a low hazard SAR (1-5). Only the C4 horizon has a medium hazard SAR (18). Since the reclamation technique is going to bury this deeper soil horizon it is doubtful if any "hot spots" are evident. Also the seed mixture is composed of salt tolerant plants.

With regards to fertilization requirements, the tests on soils upslope from these alluvial soils support the fertilizer rates proposed in the application. Also the Soil Conservation Service's test of this soil type collaborate well with the aforementioned tests and further support the proposed fertilizer program.



Sunshine Mining Company

P.O. Box 250

Eureka, Utah 84628

4. Again we feel that sufficient soils information has been provided to safely predict the fertilization rates required to promote growth.
5. We feel this is not necessary but we will substitute a disc for the drag in the reseeding techniques to provide for this requirement.
6. The C horizon in the Dornardo soils is not a suitable planting medium. A quote from the SCS Soil Survey of Fairfield-Nephi Area Utah "Typically, the surface layer is a brown stony loam about 10" thick. Below this to a depth of 60" or more is a pale brown very cobbly loam." Fines drop 30-40% below the 10" depth. We do not believe this subsoil is worth \$120,000 to move and store for some unseen future use.

Dornardo Depth	Series % Clay	% Organic	% Fragments	3"	Available Water Capacity
0-10"	15-25	1-3	5-15		.09-.15"
10-60"	15-25	0	15-40		.07-.09"

7. We agree that if current reseedings are not progressing by July, 1987 a test plot program will be needed.

We hope our arguments, as presented above, are acceptable for a final solution. If problem areas exist which will hinder approval by the Board of Oil, Gas and Mining, please contact me by phone.

Sincerely,

  
Leon J. Marian  
Manager

LJM:lr1

xc: W. Booth  
J. Jarvis